

ABSTRACT OF THE DISCLOSURE

A turbine wheel for driving rapidly rotating tools, in the form of a circular disk or ring, configured for mounting so as to be rotatable about an axis. Disposed thereon in circular
5 formation are turbine blades having axially parallel front and back faces curved in the radial direction. The front face has a lesser radius of curvature (R_3 , R_4), at least in portions, than the back face. This feature allows the turbine wheel to fit into the conventional turbine housings without relatively major redesign and with, at most, slight modifications. The turbine wheel can achieve higher torque than previous turbine wheels at the required high rotational speeds. Thus, a
10 greater quantity of material can be applied to the spraying dome or a spraying disk without a detrimental braking. Surfaces to be sprayed can be provided with a uniform coat of material in shorter time.